Notice to Comply	Application No.	Applicant(s)
	09/659,983	MELOEN ET AL.
	Examiner	Art Unit
	Regina M. DeBerry	1647

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).

☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).

☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).

☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."

☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).

☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).

☐ 7. Other:

Applicant Must Provide:
☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".

☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.

☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216
For CRF Submission Help, call (703) 308-4212
PatentIn Software Program Support
  Technical Assistance...703-287-0200
  To Purchase PatentIn Software........................703-306-2600

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _09/659,983A_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics — The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

RECEIVED

MAY 1 7 2001

TECH CENTER 1600/2900

2 ____ Wrapped Aminos — The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 ____ Incorrect Line Length — The rules require that a line not exceed 72 characters in length. This includes spaces.

4 ____ Misaligned Amino Acid Numbering — The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 ____ Non-ASCII — This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 ✓ Variable Length — Sequence(s) _3_ contain _amino acids_, which represented more than one residue.

Please present the maximum number of each residue having variable length and
indicate in the (x) feature section that some may be missing.
_<2207 - <2237_

7 ____ PatentIn ver. 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

8 ____ Skipped Sequences (OLD RULES) — Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 ____ Skipped Sequences (NEW RULES) — Sequence(s) ____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

10 ____ Use of n's or **Xaa's** (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue **n** or **Xaa** represents.

11 ✓ Use of "Artificial" (NEW RULES) — Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
Valid response is Artificial Sequence.

12 ____ Use of <220>Feature (NEW RULES) — Sequence(s) ____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of new Rules)

13 ____ PatentIn ver. 2.0 "bug" — **Please do not use "Copy to Disk" function of PatentIn version 2.0.** This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

AMC - Biotechnology Systems Branch - 4/06/2001

1647

```
        RAW SEQUENCE LISTING                    DATE: 05/03/2001
        PATENT APPLICATION:  US/09/659,983A     TIME: 12:50:25

        Input Set : A:\PTO.txt
        Output Set: N:\CRF3\05032001\I659983A.raw
```

Does Not Comply Corrected Diskette Needed

```
   3 <110> APPLICANT: Meloen, Robert Hans
   4        Oonk, Hendrica Berendina
   6 <120> TITLE OF INVENTION: An Improved Peptide, Immunogenic Composition and Vaccine or Medical
   7        Preparation, a Method to Immunise Animals Against the Hormone LHRH, and Analogs
   8        of the LHRH Tandem Repeat Peptide and their Use as Vaccine
  10 <130> FILE REFERENCE: 2183-4518US
  12 <140> CURRENT APPLICATION NUMBER: 09/659,983A
  13 <141> CURRENT FILING DATE: 2000-09-12
  15 <150> PRIOR APPLICATION NUMBER: US 09/274,048
  16 <151> PRIOR FILING DATE: 1999-03-22
  18 <150> PRIOR APPLICATION NUMBER: US 08/981,557
  19 <151> PRIOR FILING DATE: 1995-06-07
  21 <150> PRIOR APPLICATION NUMBER: PCT/NL96/00223
  22 <151> PRIOR FILING DATE: 1996-06-06
  24 <150> PRIOR APPLICATION NUMBER: US 08/447,298
  25 <151> PRIOR FILING DATE: 1995-06-07
  27 <150> PRIOR APPLICATION NUMBER: US 08/476,013
  28 <151> PRIOR FILING DATE: 1995-06-07
  30 <160> NUMBER OF SEQ ID NOS: 13
  32 <170> SOFTWARE: PatentIn version 3.0
  34 <210> SEQ ID NO: 1
  35 <211> LENGTH: 10
  36 <212> TYPE: PRT
  37 <213> ORGANISM: Sus scrofa
  39 <220> FEATURE:
  40 <221> NAME/KEY: PEPTIDE
  41 <222> LOCATION: (1)..(1)
  42 <223> OTHER INFORMATION: X=pyroglutamic acid
  45 <220> FEATURE:
  46 <221> NAME/KEY: PEPTIDE
  47 <222> LOCATION: (10)..(10)
  48 <223> OTHER INFORMATION: X=Gly-NH2
  51 <400> SEQUENCE: 1
  53 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa
  54 1               5                   10
  56 <210> SEQ ID NO: 2
  57 <211> LENGTH: 10
  58 <212> TYPE: PRT
  59 <213> ORGANISM: Homo sapiens
  61 <220> FEATURE:
  62 <221> NAME/KEY: PEPTIDE
  63 <222> LOCATION: (1)..(1)
  64 <223> OTHER INFORMATION: X=pyroglutamic acid
  67 <220> FEATURE:
  68 <221> NAME/KEY: PEPTIDE
  69 <222> LOCATION: (10)..(10)
  70 <223> OTHER INFORMATION: X=Gly-NH2
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pp 2-5

RAW SEQUENCE LISTING   DATE: 05/03/2001
PATENT APPLICATION: US/09/659,983A   TIME: 12:50:25

Input Set : A:\PTO.txt
Output Set: N:\CRF3\05032001\I659983A.raw

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        73 <400> SEQUENCE: 2
        75 Xaa His Trp Ser His Gly Trp Tyr Pro Xaa
        76 1               5               10
        78 <210> SEQ ID NO: 3
        79 <211> LENGTH: 21
        80 <212> TYPE: PRT
C-->    81 <213> ORGANISM: artificial        see item 11 on Eva Summary Sheet
        83 <220> FEATURE:
        84 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
        85       GnRH/ LHRH
        87 <220> FEATURE:
        88 <221> NAME/KEY: PEPTIDE
        89 <222> LOCATION: (1)..(1)
        90 <223> OTHER INFORMATION: X=pyroglutamic acid or Gln with attached tail of one or more addi
        91       tional amino acid
        94 <220> FEATURE:
        95 <221> NAME/KEY: PEPTIDE
        96 <222> LOCATION: (3)..(3)
        97 <223> OTHER INFORMATION: X=Trp or N(indole)formyl-tryptophan
       100 <220> FEATURE:                  Xaa can only represent a single amino acid,
       101 <221> NAME/KEY: PEPTIDE                                        nothing
       102 <222> LOCATION: (11)..(11)                                       else
       103 <223> OTHER INFORMATION: X=direct bond or a spacer group between Gly at position 10 and Gl
       104       n at position 1
       107 <220> FEATURE:
       108 <221> NAME/KEY: PEPTIDE
       109 <222> LOCATION: (14)..(14)
       110 <223> OTHER INFORMATION: X=Trp or N(indole)formyl-tryptophan
       113 <220> FEATURE:
       114 <221> NAME/KEY: PEPTIDE
       115 <222> LOCATION: (21)..(21)
       116 <223> OTHER INFORMATION: X=Gly-NH2 or Gly with attached tail of one or more amino acids
       119 <220> FEATURE:
       120 <221> NAME/KEY: VARIANT
       121 <222> LOCATION: (10)..(20)
       122 <223> OTHER INFORMATION: variable repeat sequence <>10-20    see item 6 on
       125 <400> SEQUENCE: 3                                         Eva Summary
W-->   127 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Xaa Gln His Xaa Ser Tyr    Sheet
       128 1               5               10              15
W-->   130 Gly Leu Arg Pro Xaa
       131               20
       133 <210> SEQ ID NO: 4
       134 <211> LENGTH: 21
       135 <212> TYPE: PRT
C-->   136 <213> ORGANISM: artificial        item 11
       138 <220> FEATURE:
       139 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
       140       GnRH/ LHRH
       142 <220> FEATURE:
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      143 <221> NAME/KEY: PEPTIDE
      144 <222> LOCATION: (1)..(1)
      145 <223> OTHER INFORMATION: X=pyroglutamic acid
      148 <220> FEATURE:
      149 <221> NAME/KEY: PEPTIDE
      150 <222> LOCATION: (6)..(6)
      151 <223> OTHER INFORMATION: X=D-Lys
      154 <220> FEATURE:
      155 <221> NAME/KEY: PEPTIDE
      156 <222> LOCATION: (11)..(11)
      157 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
      160 <220> FEATURE:
      161 <221> NAME/KEY: PEPTIDE
      162 <222> LOCATION: (16)..(16)
      163 <223> OTHER INFORMATION: X=D-Lys
      166 <220> FEATURE:
      167 <221> NAME/KEY: PEPTIDE
      168 <222> LOCATION: (21)..(21)
      169 <223> OTHER INFORMATION: X=Cys-NH2
      172 <400> SEQUENCE: 4
W--> 174 Xaa His Thr Ser Tyr Xaa Leu Arg Pro Gly Xaa His Thr Ser Tyr Xaa
      175 1               5                   10                  15
W--> 177 Leu Arg Pro Gly Xaa
      178                 20
      180 <210> SEQ ID NO: 5
      181 <211> LENGTH: 21
      182 <212> TYPE: PRT
C--> 183 <213> ORGANISM: artificial
      185 <220> FEATURE:
      186 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
      187         GnRH/ LHRH
      189 <220> FEATURE:
      190 <221> NAME/KEY: PEPTIDE
      191 <222> LOCATION: (1)..(1)
      192 <223> OTHER INFORMATION: X=pyroglutamic acid
      195 <220> FEATURE:
      196 <221> NAME/KEY: PEPTIDE
      197 <222> LOCATION: (4)..(4)
      198 <223> OTHER INFORMATION: X=amino acid substitution
      201 <220> FEATURE:
      202 <221> NAME/KEY: PEPTIDE
      203 <222> LOCATION: (6)..(6)
      204 <223> OTHER INFORMATION: X=D-Lys
      207 <220> FEATURE:
      208 <221> NAME/KEY: PEPTIDE
      209 <222> LOCATION: (11)..(11)
      210 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
      213 <220> FEATURE:
      214 <221> NAME/KEY: PEPTIDE
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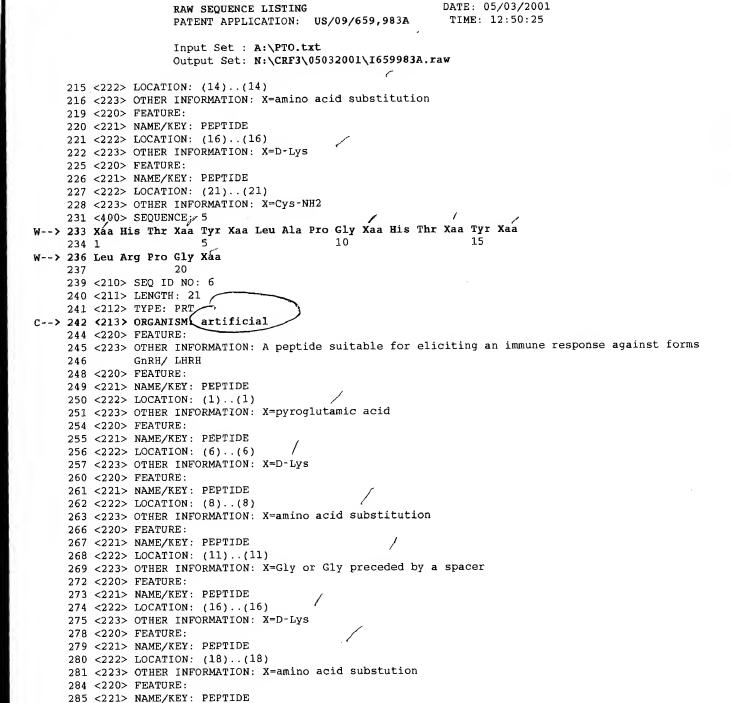
RAW SEQUENCE LISTING　　　　　　　　DATE: 05/03/2001
PATENT APPLICATION:　US/09/659,983A　　TIME: 12:50:25

Input Set : A:\PTO.txt
Output Set: N:\CRF3\05032001\I659983A.raw

```
      215 <222> LOCATION: (14)..(14)
      216 <223> OTHER INFORMATION: X=amino acid substitution
      219 <220> FEATURE:
      220 <221> NAME/KEY: PEPTIDE
      221 <222> LOCATION: (16)..(16)
      222 <223> OTHER INFORMATION: X=D-Lys
      225 <220> FEATURE:
      226 <221> NAME/KEY: PEPTIDE
      227 <222> LOCATION: (21)..(21)
      228 <223> OTHER INFORMATION: X=Cys-NH2
      231 <400> SEQUENCE: 5
W--> 233 Xaa His Thr Xaa Tyr Xaa Leu Ala Pro Gly Xaa His Thr Xaa Tyr Xaa
      234 1               5                   10              15
W--> 236 Leu Arg Pro Gly Xaa
      237               20
      239 <210> SEQ ID NO: 6
      240 <211> LENGTH: 21
      241 <212> TYPE: PRT
C--> 242 <213> ORGANISM: artificial
      244 <220> FEATURE:
      245 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
      246       GnRH/ LHRH
      248 <220> FEATURE:
      249 <221> NAME/KEY: PEPTIDE
      250 <222> LOCATION: (1)..(1)
      251 <223> OTHER INFORMATION: X=pyroglutamic acid
      254 <220> FEATURE:
      255 <221> NAME/KEY: PEPTIDE
      256 <222> LOCATION: (6)..(6)
      257 <223> OTHER INFORMATION: X=D-Lys
      260 <220> FEATURE:
      261 <221> NAME/KEY: PEPTIDE
      262 <222> LOCATION: (8)..(8)
      263 <223> OTHER INFORMATION: X=amino acid substitution
      266 <220> FEATURE:
      267 <221> NAME/KEY: PEPTIDE
      268 <222> LOCATION: (11)..(11)
      269 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
      272 <220> FEATURE:
      273 <221> NAME/KEY: PEPTIDE
      274 <222> LOCATION: (16)..(16)
      275 <223> OTHER INFORMATION: X=D-Lys
      278 <220> FEATURE:
      279 <221> NAME/KEY: PEPTIDE
      280 <222> LOCATION: (18)..(18)
      281 <223> OTHER INFORMATION: X=amino acid substution
      284 <220> FEATURE:
      285 <221> NAME/KEY: PEPTIDE
      286 <222> LOCATION: (21)..(21)
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                    RAW SEQUENCE LISTING              DATE: 05/03/2001
                    PATENT APPLICATION:  US/09/659,983A    TIME: 12:50:25

                    Input Set : A:\PTO.txt
                    Output Set: N:\CRF3\05032001\I659983A.raw

          287 <223> OTHER INFORMATION: X=Cys-NH2
          290 <400> SEQUENCE: 6
W-->   292 Xaa His Thr Ser Tyr Xaa Leu Xaa Pro Gly Xaa His Thr Ser Tyr Xaa
          293 1              5              10            15
W-->   295 Leu Xaa Pro Gly Xaa
          296              20
          298 <210> SEQ ID NO: 7
          299 <211> LENGTH: 21
          300 <212> TYPE: PRT
C-->   301 <213> ORGANISM: artificial
          303 <220> FEATURE:
          304 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
          305       GnRH/ LHRH
          307 <220> FEATURE:
          308 <221> NAME/KEY: PEPTIDE
          309 <222> LOCATION: (1)..(1)
          310 <223> OTHER INFORMATION: X=pyroglutamic acid
          313 <220> FEATURE:
          314 <221> NAME/KEY: PEPTIDE
          315 <222> LOCATION: (6)..(6)
          316 <223> OTHER INFORMATION: X=D-Lys
          319 <220> FEATURE:
          320 <221> NAME/KEY: PEPTIDE
          321 <222> LOCATION: (10)..(10)
          322 <223> OTHER INFORMATION: X=amino acid substutition
          325 <220> FEATURE:
          326 <221> NAME/KEY: PEPTIDE
          327 <222> LOCATION: (11)..(11)
          328 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
          331 <220> FEATURE:
          332 <221> NAME/KEY: PEPTIDE
          333 <222> LOCATION: (20)..(20)
          334 <223> OTHER INFORMATION: X=amino acid substitution
          337 <220> FEATURE:
          338 <221> NAME/KEY: PEPTIDE
          339 <222> LOCATION: (21)..(21)
          340 <223> OTHER INFORMATION: X=Cys-NH2
          343 <400> SEQUENCE: 7
W-->   345 Xaa His Thr Ser Tyr Xaa Leu Arg Pro Xaa Xaa His Thr Ser Tyr Xaa
          346 1              5              10            15
       348 Leu Arg Pro Xaa Xaa
          349              20
          351 <210> SEQ ID NO: 8
          352 <211> LENGTH: 42
          353 <212> TYPE: PRT
C-->   354 <213> ORGANISM: artificial
          356 <220> FEATURE:
          357 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
          358       GnRH/ LHRH
```

(handwritten note:) what about Xaa at location 16?

The types of errors shown exist <u>throughout</u> the Sequence Listing. Please check subsequent sequences for similar errors.

Please Note:
Use of n and/or Xaa have been detected in th   Sequence Listing. Please review the
Sequence Listing to ensure that a corresp nding explanation is presented in the <220> to
<223> fields of each sequenc   which presents at least one n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/659,983A

DATE: 05/03/2001
TIME: 12:50:26

Input Set : A:\PTO.txt
Output Set: N:\CRF3\05032001\I659983A.raw

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L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:81 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:136 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:183 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:242 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:301 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:354 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:428 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:475 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:522 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:575 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:581 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:640 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:684 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
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